10/018,127
Updated Search
LY/CookC 8/5/05

d his

(FILE 'HOME' ENTERED AT 12:43:39 ON 05 AUG 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 12:43:57 ON 05 AUG 2005

```
L1            0 S APNOEA? AND IGA1?
L2         4092 S IGA1?
L3            1 S L2 AND SIDS?
L4          342 S L2 AND ALTE?
L5            0 S L2 AND (INFANT DEALTH)
L6            1 S L2 AND (INFANT DEATH)
L7          124 DUPLICATE REMOVE L4 (218 DUPLICATES REMOVED)
L8            1 S L7 AND DEATH
L9            2 S L7 AND INFANT?
L10           2 DUPLICATE REMOVE L9 (0 DUPLICATES REMOVED)
L11           1 S L10 NOT L8
L12         627 S L2 AND MUCOSAL?
L13         238 DUPLICATE REMOVE L12 (389 DUPLICATES REMOVED)
L14       82468 S (URINARY TRACT INFECTION)
L15           0 S L13 AND L14
L16          12 S L14 AND IGA1
L17           3 DUPLICATE REMOVE L16 (9 DUPLICATES REMOVED)
L18         798 S (SALIVARY IMMUNOGLOBULIN?)
L19         160 S L18 AND MUCOSAL?
L20          23 S L19 AND IGA1?
L21           9 DUPLICATE REMOVE L20 (14 DUPLICATES REMOVED)
L22           7 S L2 AND DEATH?
L23           3 DUPLICATE REMOVE L22 (4 DUPLICATES REMOVED)
L24          28 S L13 AND ELISA
L25           1 S L24 AND URIN?
```

=>

d his

(FILE 'HOME' ENTERED AT 12:43:39 ON 05 AUG 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 12:43:57 ON 05 AUG 2005

```
L1             0 S APNOEA? AND IGA1?
L2          4092 S IGA1?
L3             1 S L2 AND SIDS?
L4           342 S L2 AND ALTE?
L5             0 S L2 AND (INFANT DEALTH)
L6             1 S L2 AND (INFANT DEATH)
L7           124 DUPLICATE REMOVE L4 (218 DUPLICATES REMOVED)
L8             1 S L7 AND DEATH
L9             2 S L7 AND INFANT?
L10            2 DUPLICATE REMOVE L9 (0 DUPLICATES REMOVED)
L11            1 S L10 NOT L8
L12          627 S L2 AND MUCOSAL?
L13          238 DUPLICATE REMOVE L12 (389 DUPLICATES REMOVED)
L14        82468 S (URINARY TRACT INFECTION)
L15            0 S L13 AND L14
L16           12 S L14 AND IGA1
L17            3 DUPLICATE REMOVE L16 (9 DUPLICATES REMOVED)
L18          798 S (SALIVARY IMMUNOGLOBULIN?)
L19          160 S L18 AND MUCOSAL?
L20           23 S L19 AND IGA1?
L21            9 DUPLICATE REMOVE L20 (14 DUPLICATES REMOVED)
L22            7 S L2 AND DEATH?
L23            3 DUPLICATE REMOVE L22 (4 DUPLICATES REMOVED)
L24           28 S L13 AND ELISA
L25            1 S L24 AND URIN?
```

=>

ANSWER 16 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1991:182417 BIOSIS

DN PREV199191097166; BA91:97166

TI BOTH IGA SUBCLASSES ARE REDUCED IN PAROTID SALIVA FROM PATIENT WITH AIDS.

AU MUELLER F [Reprint author]; FROLAND S S; HVATUM M; RADL J; BRANDTZAEG P

CS LIIPAT, RIKSHOSPITALET, N-0027 OSLO 1, NORWAY

SO Clinical and Experimental Immunology, (1991) Vol. 83, No. 2, pp. 203-209. CODEN: CEXIAL. ISSN: 0009-9104.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 19 Apr 1991
Last Updated on STN: 19 Apr 1991

AB Secretory IgA (SIgA), the isotypes **IgA1** and IgA2, and IgM were measured by **ELISA** is stimulated parotid saliva from patients with AIDS (n = 16), subjects with asymptomatic HIV infection (n = 28), and HIV-seronegative healthy controls (n = 19). SIgA was significantly reduced in the AIDS group (10.4 μg/ml) compared with the asymptomatic HIV-infected subjects (17.1 μg/ml) and the controls (23.0 μg/ml). This decrease comprised both **IgA1** and IgA2 to a similar extent on a relative basis. The SIgA decrease in AIDS patients was in striking contrast to their serum IgA level, which was significantly increased (6.9 g/l) compared with asymptomatic HIV-infected subjects (2.9 g/l) as well as the controls (2.8 g/l). Low parotid output of SIgA in patients with HIV infection was associated with low numbers of CD4+ lymphocytes in peripheral blood as well as the presence of oral infections. The parotid output of IgM was similar in all groups. A low level of SIgA in the external secretions of patients with AIDS may well contribute to their to their frequent **mucosal** infections of opportunistic microorganisms.

CC Cytology - Human 02508
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Blood - Blood cell studies 15004
Blood - Lymphatic tissue and reticuloendothelial system 15008
Blood - Other body fluids 15010
Dental biology - General and methods 19001
Dental biology - Pathology 19006
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - Virology 36006

IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Dental Medicine (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Physiology

IT Miscellaneous Descriptors
HUMAN IMMUNODEFICIENCY VIRUS ACQUIRED IMMUNODEFICIENCY SYNDROME
IMMUNOGLOBULIN A LYMPHOCYTES

ORGN Classifier
Retroviridae 03305
Super Taxa
DNA and RNA Reverse Transcribing Viruses; Viruses; Microorganisms
Taxa Notes
DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ANSWER 16 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1991:182417 BIOSIS
DN PREV199191097166; BA91:97166
TI BOTH IGA SUBCLASSES ARE REDUCED IN PAROTID SALIVA FROM PATIENT WITH AIDS.
AU MUELLER F [Reprint author]; FROLAND S S; HVATUM M; RADL J; BRANDTZAEG P
CS LIIPAT, RIKSHOSPITALET, N-0027 OSLO 1, NORWAY
SO Clinical and Experimental Immunology, (1991) Vol. 83, No. 2, pp. 203-209. CODEN: CEXIAL. ISSN: 0009-9104.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 19 Apr 1991
Last Updated on STN: 19 Apr 1991
AB Secretory IgA (SIgA), the isotypes **IgA1** and IgA2, and IgM were measured by **ELISA** is stimulated parotid saliva from patients with AIDS (n = 16), subjects with asymptomatic HIV infection (n = 28), and HIV-seronegative healthy controls (n = 19). SIgA was significantly reduced in the AIDS group (10.4 μg/ml) compared with the asymptomatic HIV-infected subjects (17.1 μg/ml) and the controls (23.0 μg/ml). This decrease comprised both **IgA1** and IgA2 to a similar extent on a relative basis. The SIgA decrease in AIDS patients was in striking contrast to their serum IgA level, which was significantly increased (6.9 g/l) compared with asymptomatic HIV-infected subjects (2.9 g/l) as well as the controls (2.8 g/l). Low parotid output of SIgA in patients with HIV infection was associated with low numbers of CD4+ lymphocytes in peripheral blood as well as the presence of oral infections. The parotid output of IgM was similar in all groups. A low level of SIgA in the external secretions of patients with AIDS may well contribute to their to their frequent **mucosal** infections of opportunistic microorganisms.
CC Cytology - Human 02508
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Blood - Blood cell studies 15004
Blood - Lymphatic tissue and reticuloendothelial system 15008
Blood - Other body fluids 15010
Dental biology - General and methods 19001
Dental biology - Pathology 19006
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - Virology 36006
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Dental Medicine (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Physiology
IT Miscellaneous Descriptors
HUMAN IMMUNODEFICIENCY VIRUS ACQUIRED IMMUNODEFICIENCY SYNDROME IMMUNOGLOBULIN A LYMPHOCYTES
ORGN Classifier
Retroviridae 03305
Super Taxa
DNA and RNA Reverse Transcribing Viruses; Viruses; Microorganisms
Taxa Notes
DNA and RNA Reverse Transcribing Viruses, Microorganisms, Viruses
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ANSWER 14 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1991:318653 BIOSIS

DN PREV199192029168; BA92:29168

TI THE HIGH LECTIN-BINDING CAPACITY OF HUMAN SECRETORY IGA PROTECTS NONSPECIFICALLY MUCOSA AGAINST ENVIRONMENTAL ANTIGENS.

AU DAVIN J-C [Reprint author]; SENTERRE J; MAHIEU P R

CS DEP PEDIATRICS, UNIV LIEGE, CHU SART-TILMAN, B-4000 LIEGE, BELG

SO Biology of the Neonate, (1991) Vol. 59, No. 3, pp. 121-125.
CODEN: BNEOBV. ISSN: 0006-3126.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 15 Jul 1991
Last Updated on STN: 15 Jul 1991

AB The anti-infectious role of human milk may be, at least partly, ascribed to its content in secretory IgA. As lectins are present in various infectious antigens, the binding of different types of IgA to three lectins (concanavalin A, peanut agglutinin, wheat germ agglutinin) was studied by **ELISA**. The specificity of those bindings was assessed by inhibitory experiments performed with the corresponding oligosaccharides. The following were found for the three lectins: (1) the lectin-binding capacity of colostrum secretory IgA was markedly greater than that of normal plasma IgA ($p < 0.001$); (2) the lectin-binding capacity of polymeric **IgA1** was greater than that of monomeric **IgA1** ($p < 0.001$). This property of **mucosal** IgA may be responsible of a nonimmune opsonization able to prevent the early step of some infectious **mucosal** disease, i.e. the attachment of bacteria to epithelial cells by lectin-like bonds and also the penetration into the body of some antigens able to favor the development of allergy. Milk **mucosal** IgA, present in significant amounts of human colostrum and mature milk - but not infant formulas - may therefore play an important polyvalent protective role in newborns.

CC Physical anthropology and ethnobiology 05000
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Membrane phenomena 10508
Enzymes - Methods 10804
Metabolism - Carbohydrates 13004
Metabolism - Proteins, peptides and amino acids 13012
Nutrition - General studies, nutritional status and methods 13202
Reproductive system - Physiology and biochemistry 16504
Pediatrics - 25000
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - General and methods 36001

IT Major Concepts
Clinical Endocrinology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Membranes (Cell Biology); Metabolism; Nutrition; Pediatrics (Human Medicine, Medical Sciences); Reproductive System (Reproduction)

IT Miscellaneous Descriptors
NEWBORNS IMMUNOGLOBULIN A BREAST FEEDING INFECTIOUS DISEASE **ELISA**

ORGN Classifier
Microorganisms 01000
Super Taxa
Microorganisms
Taxa Notes
Microorganisms

ORGN Classifier
Hominidae 86215

Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ANSWER 10 OF 28 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1996:124138 BIOSIS

DN PREV199698696273

TI Subclasses of IgA antibodies in serum and saliva samples of newborns and infants immunized against rotavirus.

AU Friedman, M. G. [Reprint author]; Entin, N.; Zedaka, R.; Dagan, R.

CS Virol. Unit, Fac. Health Sci., Ben Gurion Univ. Negev , PO Box 653, Beer Sheva 84105-IL, Israel

SO Clinical and Experimental Immunology, (1996) Vol. 103, No. 2, pp. 206-211. CODEN: CEXIAL. ISSN: 0009-9104.

DT Article

LA English

ED Entered STN: 27 Mar 1996

Last Updated on STN: 27 Mar 1996

AB Little is known about subclass levels of IgA in serum or saliva of infants in the perinatal period. We have previously shown that very young infants are capable of responding to an experimental rotavirus vaccine with both serum and salivary IgA, and that small amounts of IgA are already detectable in cord blood of these infants. In the present study, total **IgA1** and IgA2 antibodies in serum and saliva samples of some of these infants at birth, at 6 weeks of age, and at 12 weeks of age, were determined by a quantitative **ELISA**. Also, subclass-specific IgA antibodies to the rotavirus group A common antigen were determined by **ELISA**. The ratio of average serum concentrations of **IgA1** to IgA2 for 14 infants at 6 weeks of age was 19:1, while in saliva it was 5:1. Between 6 and 12 weeks of age levels of serum **IgA1** increased while levels or IgA2 did not increase perceptibly. Concentrations of **IgA1** were higher in infant sera than in saliva, while concentrations of IgA2 were slightly higher in saliva than in serum. When calculated as specific **ELISA** units per mg **IgA1**, more salivary **IgA1** was specific for rotavirus than serum **IgA1**. Further studies are needed to determine when infant IgA2 levels rise to values more characteristic of children and adults. This may be of significance for infant **mucosal** immunizations if secretory IgA2, more resistant to bacterial proteases than **IgA1**, is required for efficient defence of the respiratory and intestinal tracts.

CC Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Blood - Blood and lymph studies 15002
Blood - Lymphatic tissue and reticuloendothelial system 15008
Blood - Other body fluids 15010
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - Virology 36006

IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Infection; Physiology

IT Miscellaneous Descriptors
ELISA; IMMUNE RESPONSE; IMMUNOGLOBULIN A

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGN Classifier
Reoviridae 03402
Super Taxa
dsRNA Viruses; Viruses; Microorganisms

Organism Name
Reoviridae
Taxa Notes
Double-Stranded RNA Viruses, Microorganisms, Viruses

ANSWER 7 OF 17 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 5
AN 1996:124138 BIOSIS
DN PREV199698696273
TI Subclasses of IgA antibodies in serum and saliva samples of newborns and **infants** immunized against rotavirus.
AU Friedman, M. G. [Reprint author]; Entin, N.; Zedaka, R.; Dagan, R.
CS Virol. Unit, Fac. Health Sci., Ben Gurion Univ. Negev , PO Box 653, Beer Sheva 84105-IL, Israel
SO Clinical and Experimental Immunology, (1996) Vol. 103, No. 2, pp. 206-211. CODEN: CEXIAL. ISSN: 0009-9104.
DT Article
LA English
ED Entered STN: 27 Mar 1996
Last Updated on STN: 27 Mar 1996
AB Little is known about subclass levels of IgA in serum or saliva of **infants** in the perinatal period. We have previously shown that very young **infants** are capable of responding to an experimental rotavirus vaccine with both serum and salivary IgA, and that small amounts of IgA are already detectable in cord blood of these **infants**. In the present study, total **IgA1** and IgA2 antibodies in serum and saliva samples of some of these **infants** at birth, at 6 weeks of age, and at 12 weeks of age, were determined by a quantitative ELISA. Also, subclass-specific IgA antibodies to the rotavirus group A common antigen were determined by ELISA. The ratio of average serum concentrations of **IgA1** to IgA2 for 14 **infants** at 6 weeks of age was 19:1, while in saliva it was 5:1. Between 6 and 12 weeks of age levels of serum **IgA1** increased while levels or IgA2 did not increase perceptibly. Concentrations of **IgA1** were higher in **infant** sera than in saliva, while concentrations of IgA2 were slightly higher in saliva than in serum. When calculated as specific ELISA units per mg **IgA1**, more salivary **IgA1** was specific for rotavirus than serum **IgA1**. Further studies are needed to determine when **infant** IgA2 levels rise to values more characteristic of children and adults. This may be of significance for **infant mucosal** immunizations if secretory IgA2, more resistant to bacterial proteases than **IgA1**, is required for efficient defence of the respiratory and intestinal tracts.
CC Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Blood - Blood and lymph studies 15002
Blood - Lymphatic tissue and reticuloendothelial system 15008
Blood - Other body fluids 15010
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - Virology 36006
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Infection; Physiology
IT Miscellaneous Descriptors
ELISA; IMMUNE RESPONSE; IMMUNOGLOBULIN A
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
ORGN Classifier
Reoviridae 03402
Super Taxa
dsRNA Viruses; Viruses; Microorganisms

rotavirus
↳ ALTE * *

102(b)

Organism Name
Reoviridae
Taxa Notes
Double-Stranded RNA Viruses, Microorganisms, Viruses

ANSWER 17 OF 17 MEDLINE on STN
AN 87309159 MEDLINE
DN PubMed ID: 3040823
TI Ontogeny and senescence of salivary immunity.
AU Smith D J; Taubman M A; Ebersole J L
NC DE-06153 (NIDCR)
DE-07009 (NIDCR)
SO Journal of dental research, (1987 Feb) 66 (2) 451-6.
Journal code: 0354343. ISSN: 0022-0345.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Dental Journals; Priority Journals
EM 198710
ED Entered STN: 19900305
Last Updated on STN: 20000303
Entered Medline: 19871007
AB The objective of the present study was to evaluate the capacity for secretory immune responses throughout life. This was done by measuring, by single radial immunodiffusion, the concentrations of IgA and **IgA1** subclass in saliva samples of subjects who ranged in age from two months to 91 years. The presence of salivary IgA antibodies to two nearly ubiquitous **mucosal** antigens, Streptococcus mutans glucosyltransferase (GTF) and killed poliovirus (Types 1, 2, and 3), was measured in an enzyme-linked immunosorbent assay in this population. Whole saliva from 2-5-month-old **infants** contained significantly less IgA than did parotid saliva of any adult group. Also, a significantly higher proportion of the total salivary IgA was **IgA1** in **infants'** saliva than was found in parotid saliva of adults. Salivary IgA and **IgA1** subclass levels in parotid saliva of young and old (70-91 years) adults did not differ. Salivary IgA antibody levels to GTF were negligible in most saliva samples of children less than five years old, while 40% of children older than one year had detectable levels of salivary antibody to poliovirus (PV). This differences between response to GTF and PV antigens may reflect differences in antigenic challenge. Parotid saliva of the oldest group (70-91 years) had narrowly distributed and uniformly low levels of IgA antibody to both antigens. Since their IgA immunoglobulin levels were the same as in younger adults, the low antibody levels in this oldest group may be associated with changes in the number or function of T or B lymphocytes or antigen-processing cells, and/or may result from diminished levels of challenge with these antigens.
CT Adolescent
Adult
Aged
Aged, 80 and over
*Aging: IM, immunology
Antibodies, Bacterial: AN, analysis
Antibodies, Viral: AN, analysis
Child, Preschool
Humans
Immunoglobulin A, Secretory: CL, classification
*Immunoglobulin A, Secretory: IM, immunology
Infant
Middle Aged
Polioviruses: IM, immunology
Research Support, U.S. Gov't, P.H.S.
*Salivary Proteins: IM, immunology
Streptococcus mutans: IM, immunology
CN 0 (Antibodies, Bacterial); 0 (Antibodies, Viral); 0 (Immunoglobulin A, Secretory); 0 (Salivary Proteins)

Primates; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

=>
Connection closed by remote host

ANSWER 15 OF 17 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 7

AN 1991:318653 BIOSIS

DN PREV199192029168; BA92:29168

TI THE HIGH LECTIN-BINDING CAPACITY OF HUMAN SECRETORY IGA PROTECTS NONSPECIFICALLY MUCOSA AGAINST ENVIRONMENTAL ANTIGENS.

AU DAVIN J-C [Reprint author]; SENTERRE J; MAHIEU P R

CS DEP PEDIATRICS, UNIV LIEGE, CHU SART-TILMAN, B-4000 LIEGE, BELG

SO Biology of the Neonate, (1991) Vol. 59, No. 3, pp. 121-125.
CODEN: BNEOBV. ISSN: 0006-3126.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 15 Jul 1991
Last Updated on STN: 15 Jul 1991

AB The anti-infectious role of human milk may be, at least partly, ascribed to its content in secretory IgA. As lectins are present in various infectious antigens, the binding of different types of IgA to three lectins (concanavalin A, peanut agglutinin, wheat germ agglutinin) was studied by ELISA. The specificity of those bindings was assessed by inhibitory experiments performed with the corresponding oligosaccharides. The following were found for the three lectins: (1) the lectin-binding capacity of colostrum secretory IgA was markedly greater than that of normal plasma IgA ($p < 0.001$); (2) the lectin-binding capacity of polymeric **IgA1** was greater than that of monomeric **IgA1** ($p < 0.001$). This property of **mucosal** IgA may be responsible of a nonimmune opsonization able to prevent the early step of some infectious **mucosal** disease, i.e. the attachment of bacteria to epithelial cells by lectin-like bonds and also the penetration into the body of some antigens able to favor the development of allergy. Milk **mucosal** IgA, present in significant amounts of human colostrum and mature milk - but not **infant** formulas - may therefore play an important polyvalent protective role in newborns.

CC Physical anthropology and ethnobiology 05000
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Membrane phenomena 10508
Enzymes - Methods 10804
Metabolism - Carbohydrates 13004
Metabolism - Proteins, peptides and amino acids 13012
Nutrition - General studies, nutritional status and methods 13202
Reproductive system - Physiology and biochemistry 16504
Pediatrics - 25000
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - General and methods 36001

IT Major Concepts
Clinical Endocrinology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Membranes (Cell Biology); Metabolism; Nutrition; Pediatrics (Human Medicine, Medical Sciences); Reproductive System (Reproduction)

IT Miscellaneous Descriptors
NEWBORNS IMMUNOGLOBULIN A BREAST FEEDING INFECTIOUS DISEASE ELISA

ORGN Classifier
Microorganisms 01000
Super Taxa
Microorganisms
Taxa Notes
Microorganisms

ORGN Classifier
Hominidae 86215
Super Taxa

ANSWER 10 OF 17 MEDLINE on STN

AN 94363899 MEDLINE

DN PubMed ID: 7915975

TI Early impairment of gut **mucosal** immunity in HIV-1-infected children.

AU Quesnel A; Moja P; Blanche S; Griscelli C; Genin C

CS Laboratory of Research in Immunology, University of Saint-Etienne, France.

SO Clinical and experimental immunology, (1994 Sep) 97 (3) 380-5.
Journal code: 0057202. ISSN: 0009-9104.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; AIDS

EM 199410

ED Entered STN: 19941021
Last Updated on STN: 19970203
Entered Medline: 19941013

AB This study was performed in 27 HIV-1+ children to characterize the IgA hyperglobulinaemia observed in the serum during the course of HIV-1 infection. By contrast with serum IgG, which increased very early, IgA elevation was related to the decrease of CD4+ cell percentage. It was demonstrated that **IgA1** subclass increased selectively.
Secretory IgA (SIgA) and IgA and IgG activity to gliadin, bovine serum albumin (BSA) and at a lower level to casein could be detected in the serum at the early stages of HIV infection, but SIgA levels and IgA activity to gliadin further increased during the course of immunodeficiency. By contrast, IgA and IgG activity to tetanus toxoid did not change. These data demonstrate that the hyper IgA, closely related to the degree of immunodeficiency, could be due in part to a disturbance of the gut **mucosal** immune system. Moreover, impaired intestinal immunity seems to appear very early, and to progress during the course of paediatric HIV-1 infection.

CT Check Tags: Female; Male
CD4-Positive T-Lymphocytes
Child
Child, Preschool
Gliadin: IM, immunology
HIV Antibodies: AN, analysis
*HIV Infections: IM, immunology
*HIV-1: IM, immunology
Humans
*Hypergammaglobulinemia: IM, immunology
Immunity
Immunoglobulin A: AN, analysis
Immunoglobulin A, Secretory: AN, analysis
Immunoglobulin G: AN, analysis
Infant
*Intestinal Mucosa: IM, immunology
Research Support, Non-U.S. Gov't

RN 9007-90-3 (Gliadin)

CN 0 (HIV Antibodies); 0 (Immunoglobulin A); 0 (Immunoglobulin A, Secretory); 0 (Immunoglobulin G)

ANSWER 10 OF 17 MEDLINE on STN

AN 94363899 MEDLINE

DN PubMed ID: 7915975

TI Early impairment of gut **mucosal** immunity in HIV-1-infected children.

AU Quesnel A; Moja P; Blanche S; Griscelli C; Genin C

CS Laboratory of Research in Immunology, University of Saint-Etienne, France.

SO Clinical and experimental immunology, (1994 Sep) 97 (3) 380-5.
Journal code: 0057202. ISSN: 0009-9104.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals; AIDS

EM 199410

ED Entered STN: 19941021
Last Updated on STN: 19970203
Entered Medline: 19941013

AB This study was performed in 27 HIV-1+ children to characterize the IgA hyperglobulinaemia observed in the serum during the course of HIV-1 infection. By contrast with serum IgG, which increased very early, IgA elevation was related to the decrease of CD4+ cell percentage. It was demonstrated that **IgA1** subclass increased selectively.
Secretory IgA (SIgA) and IgA and IgG activity to gliadin, bovine serum albumin (BSA) and at a lower level to casein could be detected in the serum at the early stages of HIV infection, but SIgA levels and IgA activity to gliadin further increased during the course of immunodeficiency. By contrast, IgA and IgG activity to tetanus toxoid did not change. These data demonstrate that the hyper IgA, closely related to the degree of immunodeficiency, could be due in part to a disturbance of the gut **mucosal** immune system. Moreover, impaired intestinal immunity seems to appear very early, and to progress during the course of paediatric HIV-1 infection.

CT Check Tags: Female; Male
CD4-Positive T-Lymphocytes
Child
Child, Preschool
Gliadin: IM, immunology
HIV Antibodies: AN, analysis
*HIV Infections: IM, immunology
*HIV-1: IM, immunology
Humans
*Hypergammaglobulinemia: IM, immunology
Immunity
Immunoglobulin A: AN, analysis
Immunoglobulin A, Secretory: AN, analysis
Immunoglobulin G: AN, analysis
Infant
*Intestinal Mucosa: IM, immunology
Research Support, Non-U.S. Gov't

RN 9007-90-3 (Gliadin)

CN 0 (HIV Antibodies); 0 (Immunoglobulin A); 0 (Immunoglobulin A, Secretory); 0 (Immunoglobulin G)

10/018,127
LKook 7/7/05

ANSWER 7 OF 17 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 5
AN 1996:124138 BIOSIS
DN PREV199698696273
TI Subclasses of IgA antibodies in serum and saliva samples of newborns and **infants** immunized against rotavirus.
AU Friedman, M. G. [Reprint author]; Entin, N.; Zedaka, R.; Dagan, R.
CS Virol. Unit, Fac. Health Sci., Ben Gurion Univ. Negev , PO Box 653, Beer Sheva 84105-IL, Israel
SO Clinical and Experimental Immunology, (1996) Vol. 103, No. 2, pp. 206-211. CODEN: CEXIAL. ISSN: 0009-9104.
DT Article
LA English
ED Entered STN: 27 Mar 1996
Last Updated on STN: 27 Mar 1996
AB Little is known about subclass levels of IgA in serum or saliva of **infants** in the perinatal period. We have previously shown that very young **infants** are capable of responding to an experimental rotavirus vaccine with both serum and salivary IgA, and that small amounts of IgA are already detectable in cord blood of these **infants**. In the present study, total **IgA1** and IgA2 antibodies in serum and saliva samples of some of these **infants** at birth, at 6 weeks of age, and at 12 weeks of age, were determined by a quantitative ELISA. Also, subclass-specific IgA antibodies to the rotavirus group A common antigen were determined by ELISA. The ratio of average serum concentrations of **IgA1** to IgA2 for 14 **infants** at 6 weeks of age was 19:1, while in saliva it was 5:1. Between 6 and 12 weeks of age levels of serum **IgA1** increased while levels or IgA2 did not increase perceptibly. Concentrations of **IgA1** were higher in **infant** sera than in saliva, while concentrations of IgA2 were slightly higher in saliva than in serum. When calculated as specific ELISA units per mg **IgA1**, more salivary **IgA1** was specific for rotavirus than serum **IgA1**. Further studies are needed to determine when **infant** IgA2 levels rise to values more characteristic of children and adults. This may be of significance for **infant mucosal** immunizations if secretory IgA2, more resistant to bacterial proteases than **IgA1**, is required for efficient defence of the respiratory and intestinal tracts.
CC Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Methods and techniques 10504
Blood - Blood and lymph studies 15002
Blood - Lymphatic tissue and reticuloendothelial system 15008
Blood - Other body fluids 15010
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - Virology 36006
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Infection; Physiology
IT Miscellaneous Descriptors
ELISA; IMMUNE RESPONSE; IMMUNOGLOBULIN A
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
ORGN Classifier
Reoviridae 03402
Super Taxa
dsRNA Viruses; Viruses; Microorganisms

Organism Name
Reoviridae
Taxa Notes
Double-Stranded RNA Viruses, Microorganisms, Viruses

ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1993:523497 BIOSIS
DN PREV199396136904
TI V-region-mediated binding of human Ig by protein A.
AU Ibrahim, Saleh [Reprint author]; Seppala, Ilkka; Makela, Olli
CS Dep. Bacteriol. Immunology, P.O. Box 21, Haartmaninkatu 3, 00014 Univ. Helsinki, Finland
SO Journal of Immunology, (1993) Vol. 151, No. 7, pp. 3597-3603.
CODEN: JOIMA3. ISSN: 0022-1767.
DT Article
LA English
ED Entered STN: 19 Nov 1993
Last Updated on STN: 3 Jan 1995
AB The Fab-mediated "**alternative**" binding of Ig by staphylococcal protein A is a marker of a set of V-H genes (a subset of family V-H3 in man). We typed 115 monoclonal human Ig as **alternative** binders or nonbinders. The proportion of binders varied depending on the isotype, 35% in IgM but only 11-13% in **IgA1** and IgG3. It was 28% among lambda-chain-bearing but 16% among kappa-bearing monoclonal Ig. Independent estimates of the proportions bound were obtained by studying polyclonal Ig of 10 healthy adults. The proportions bound were close to those observed in the study of monoclonal Ig (the means were IgM 32%, **IgA1** 13%, IgA2 24%, IgG3 14%). A higher proportion of **infant** than adult Ig was bound by protein A. Also, the proportion was less isotype-dependent in **infants** than in adults. At the age of 4 mo, 47% of IgM was bound (mean of 10 children), the values of other isotypes were: **IgA1** 35%, IgA2 39%, and IgG3 38%. At the age of 14 mo the proportion of **alternative** binders had decreased but was still far from adult values. We propose that ontogenically early ("virgin") B cells, besides being rich in IgM and kappa-chain producers, are rich in producers of **alternative** binders. A subsequent selection reduces the proportion of these B cells so that in ontogenically most developed B cell populations, e.g., those producing **IgA1** kappa, such cells make up only about 10% of the total.
CC Cytology - Human 02508
Genetics - Human 03508
Biochemistry studies - Proteins, peptides and amino acids 10064
Blood - Lymphatic tissue and reticuloendothelial system 15008
Physiology and biochemistry of bacteria 31000
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Genetics; Immune System (Chemical Coordination and Homeostasis); Physiology
IT Chemicals & Biochemicals
PROTEIN A
IT Miscellaneous Descriptors
MAJOR HISTOCOMPATIBILITY COMPLEX; T CELL
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Hominidae
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
ORGN Classifier
Micrococcaceae 07702
Super Taxa
Gram-Positive Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Micrococcaceae

Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates
RN 521-18-6 (PROTEIN A)

ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1993:523497 BIOSIS
DN PREV199396136904
TI V-region-mediated binding of human Ig by protein A.
AU Ibrahim, Saleh [Reprint author]; Seppala, Ilkka; Makela, Olli
CS Dep. Bacteriol. Immunology, P.O. Box 21, Haartmaninkatu 3, 00014 Univ. Helsinki, Finland
SO Journal of Immunology, (1993) Vol. 151, No. 7, pp. 3597-3603.
CODEN: JOIMA3. ISSN: 0022-1767.
DT Article
LA English
ED Entered STN: 19 Nov 1993
Last Updated on STN: 3 Jan 1995
AB The Fab-mediated "**alternative**" binding of Ig by staphylococcal protein A is a marker of a set of V-H genes (a subset of family V-H3 in man). We typed 115 monoclonal human Ig as **alternative** binders or nonbinders. The proportion of binders varied depending on the isotype, 35% in IgM but only 11-13% in **IgA1** and IgG3. It was 28% among lambda-chain-bearing but 16% among kappa-bearing monoclonal Ig. Independent estimates of the proportions bound were obtained by studying polyclonal Ig of 10 healthy adults. The proportions bound were close to those observed in the study of monoclonal Ig (the means were IgM 32%, **IgA1** 13%, IgA2 24%, IgG3 14%). A higher proportion of **infant** than adult Ig was bound by protein A. Also, the proportion was less isotype-dependent in **infants** than in adults. At the age of 4 mo, 47% of IgM was bound (mean of 10 children), the values of other isotypes were: **IgA1** 35%, IgA2 39%, and IgG3 38%. At the age of 14 mo the proportion of **alternative** binders had decreased but was still far from adult values. We propose that ontogenically early ("virgin") B cells, besides being rich in IgM and kappa-chain producers, are rich in producers of **alternative** binders. A subsequent selection reduces the proportion of these B cells so that in ontogenically most developed B cell populations, e.g., those producing **IgA1** kappa, such cells make up only about 10% of the total.
CC Cytology - Human 02508
Genetics - Human 03508
Biochemistry studies - Proteins, peptides and amino acids 10064
Blood - Lymphatic tissue and reticuloendothelial system 15008
Physiology and biochemistry of bacteria 31000
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Clinical Endocrinology (Human Medicine, Medical Sciences); Genetics; Immune System (Chemical Coordination and Homeostasis); Physiology
IT Chemicals & Biochemicals
PROTEIN A
IT Miscellaneous Descriptors
MAJOR HISTOCOMPATIBILITY COMPLEX; T CELL
ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Hominidae
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
ORGN Classifier
Micrococcaceae 07702
Super Taxa
Gram-Positive Cocci; Eubacteria; Bacteria; Microorganisms
Organism Name
Micrococcaceae

Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGN Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates
RN 521-18-6 (PROTEIN A)

ANSWER 17 OF 17 MEDLINE on STN
AN 87309159 MEDLINE
DN PubMed ID: 3040823
TI Ontogeny and senescence of salivary immunity.
AU Smith D J; Taubman M A; Ebersole J L
NC DE-06153 (NIDCR)
DE-07009 (NIDCR)
SO Journal of dental research, (1987 Feb) 66 (2) 451-6.
Journal code: 0354343. ISSN: 0022-0345.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Dental Journals; Priority Journals
EM 198710
ED Entered STN: 19900305
Last Updated on STN: 20000303
Entered Medline: 19871007
AB The objective of the present study was to evaluate the capacity for secretory immune responses throughout life. This was done by measuring, by single radial immunodiffusion, the concentrations of IgA and **IgA1** subclass in saliva samples of subjects who ranged in age from two months to 91 years. The presence of salivary IgA antibodies to two nearly ubiquitous **mucosal** antigens, Streptococcus mutans glucosyltransferase (GTF) and killed poliovirus (Types 1, 2, and 3), was measured in an enzyme-linked immunosorbent assay in this population. Whole saliva from 2-5-month-old **infants** contained significantly less IgA than did parotid saliva of any adult group. Also, a significantly higher proportion of the total salivary IgA was **IgA1** in **infants'** saliva than was found in parotid saliva of adults. Salivary IgA and **IgA1** subclass levels in parotid saliva of young and old (70-91 years) adults did not differ. Salivary IgA antibody levels to GTF were negligible in most saliva samples of children less than five years old, while 40% of children older than one year had detectable levels of salivary antibody to poliovirus (PV). This differences between response to GTF and PV antigens may reflect differences in antigenic challenge. Parotid saliva of the oldest group (70-91 years) had narrowly distributed and uniformly low levels of IgA antibody to both antigens. Since their IgA immunoglobulin levels were the same as in younger adults, the low antibody levels in this oldest group may be associated with changes in the number or function of T or B lymphocytes or antigen-processing cells, and/or may result from diminished levels of challenge with these antigens.
CT Adolescent
Adult
Aged
Aged, 80 and over
*Aging: IM, immunology
Antibodies, Bacterial: AN, analysis
Antibodies, Viral: AN, analysis
Child, Preschool
Humans
Immunoglobulin A, Secretory: CL, classification
*Immunoglobulin A, Secretory: IM, immunology
Infant
Middle Aged
Polioviruses: IM, immunology
Research Support, U.S. Gov't, P.H.S.
*Salivary Proteins: IM, immunology
Streptococcus mutans: IM, immunology
CN 0 (Antibodies, Bacterial); 0 (Antibodies, Viral); 0 (Immunoglobulin A, Secretory); 0 (Salivary Proteins)

```
=>
Connection closed by remote host
```

ANSWER 15 OF 17 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 7

AN 1991:318653 BIOSIS

DN PREV199192029168; BA92:29168

TI THE HIGH LECTIN-BINDING CAPACITY OF HUMAN SECRETORY IGA PROTECTS NONSPECIFICALLY MUCOSA AGAINST ENVIRONMENTAL ANTIGENS.

AU DAVIN J-C [Reprint author]; SENTERRE J; MAHIEU P R

CS DEP PEDIATRICS, UNIV LIEGE, CHU SART-TILMAN, B-4000 LIEGE, BELG

SO Biology of the Neonate, (1991) Vol. 59, No. 3, pp. 121-125.
CODEN: BNEOBV. ISSN: 0006-3126.

DT Article

FS BA

LA ENGLISH

ED Entered STN: 15 Jul 1991
Last Updated on STN: 15 Jul 1991

AB The anti-infectious role of human milk may be, at least partly, ascribed to its content in secretory IgA. As lectins are present in various infectious antigens, the binding of different types of IgA to three lectins (concanavalin A, peanut agglutinin, wheat germ agglutinin) was studied by ELISA. The specificity of those bindings was assessed by inhibitory experiments performed with the corresponding oligosaccharides. The following were found for the three lectins: (1) the lectin-binding capacity of colostrum secretory IgA was markedly greater than that of normal plasma IgA ($p < 0.001$); (2) the lectin-binding capacity of polymeric **IgA1** was greater than that of monomeric **IgA1** ($p < 0.001$). This property of **mucosal** IgA may be responsible of a nonimmune opsonization able to prevent the early step of some infectious **mucosal** disease, i.e. the attachment of bacteria to epithelial cells by lectin-like bonds and also the penetration into the body of some antigens able to favor the development of allergy. Milk **mucosal** IgA, present in significant amounts of human colostrum and mature milk - but not **infant** formulas - may therefore play an important polyvalent protective role in newborns.

CC Physical anthropology and ethnobiology 05000
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Biophysics - Membrane phenomena 10508
Enzymes - Methods 10804
Metabolism - Carbohydrates 13004
Metabolism - Proteins, peptides and amino acids 13012
Nutrition - General studies, nutritional status and methods 13202
Reproductive system - Physiology and biochemistry 16504
Pediatrics - 25000
Immunology - General and methods 34502
Immunology - Bacterial, viral and fungal 34504
Immunology - Immunopathology, tissue immunology 34508
Medical and clinical microbiology - General and methods 36001

IT Major Concepts
Clinical Endocrinology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Membranes (Cell Biology); Metabolism; Nutrition; Pediatrics (Human Medicine, Medical Sciences); Reproductive System (Reproduction)

IT Miscellaneous Descriptors
NEWBORNS IMMUNOGLOBULIN A BREAST FEEDING INFECTIOUS DISEASE ELISA

ORGN Classifier
Microorganisms 01000
Super Taxa
Microorganisms
Taxa Notes
Microorganisms

ORGN Classifier
Hominidae 86215
Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ANSWER 13 OF 17 MEDLINE on STN
AN 92110484 MEDLINE
DN PubMed ID: 1730067
TI Ontogeny of immunity to oral microbiota in humans.
AU Smith D J; Taubman M A
CS Department of Immunology, Forsyth Dental Center, Boston, MA 02115.
NC DE-04733 (NIDCR)
DE-06153 (NIDCR)
SO Critical reviews in oral biology and medicine : an official publication of the American Association of Oral Biologists, (1992) 3 (1-2) 109-33. Ref: 127
Journal code: 9009999. ISSN: 1045-4411.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Dental Journals; Priority Journals
EM 199202
ED Entered STN: 19920308
Last Updated on STN: 20000303
Entered Medline: 19920218
AB This article reviews the ontogeny of immune systems in the human oral cavity that may influence the colonization, accumulation, or pathogenesis of oral microbiota. The prenatal development of cellular components associated with the secretory immune system reveals that the initial organization of tissue into Peyer's patches can first be detected immunohistologically at 11 weeks gestation. Epithelial cells positive for secretory component and immunocytes positive for IgM can be detected in salivary gland tissue by 19 to 20 weeks and continue to predominate during gestation. After birth, immunocytes containing IgA begin to dominate. Essentially, no IgA can be detected in saliva at birth. However, salivary IgA and IgM often appear soon thereafter, presumably in response to environmental antigenic and mitogenic challenges. Salivary IgA in young **infants** has molecular characteristics of secretory IgA and becomes the quantitatively predominate Ig in saliva. Both IgA subclasses are present in proportions characteristic of adult pure glandular salivas in many 1- to 2-month-old **infants**, although the appearance of IgA2 is delayed in some subjects. Many innate, antibody, and cellular immune components are found in maternal colostrum and breast milk. The antibacterial properties of these maternal factors are diverse and can exert multifaceted protective effects on the **infant**'s alimentary tract. The **infant** apparently can mount **mucosal** immune responses quite early in life. For example, salivary antibody activity to organisms that originally colonize the gut (e.g., E. coli) or the oral cavity (e.g., S. mitis, S. salivarius) can be detected by 1 to 2 months of age. Most of this antibody activity has characteristics of secretory IgA, although some IgM antibody can also be initially detected. Salivary **IgA1** and IgA2 antibody specificities to S. mitis and S. salivarius components increase qualitatively and quantitatively during the first few years of life. Salivary IgA antibody to components of streptococci that require hard surfaces for colonization (e.g., S. sanguis and mutans streptococci) generally appear after tooth eruption. The loss of placentally derived maternal IgG antibody specificities to these microbiota in the circulation is replaced by de novo synthesis, presumably as a result of the teething process. These IgG antibodies can enter the oral cavity in the gingival crevicular fluid and by the process of teething.(ABSTRACT TRUNCATED AT 400 WORDS)
CT *Bacteria: IM, immunology
Fetus
Humans
Immunity, Cellular: PH, physiology
Immunoglobulins: PH, physiology

*Mouth: IM, immunology
Research Support, U.S. Gov't, P.H.S.
Tooth Eruption: IM, immunology
CN 0 (Immunoglobulins)

ANSWER 11 OF 17 MEDLINE on STN
AN 94011364 MEDLINE
DN PubMed ID: 8406854
TI Antigenic variation of immunoglobulin A1 proteases among sequential isolates of Haemophilus influenzae from healthy children and patients with chronic obstructive pulmonary disease.
AU Lomholt H; van Alphen L; Kilian M
CS Institute of Medical Microbiology, University of Aarhus, Denmark.
SO Infection and immunity, (1993 Nov) 61 (11) 4575-81.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199311
ED Entered STN: 19940117
Last Updated on STN: 19960129
Entered Medline: 19931124
AB Considerable antigenic heterogeneity has been identified among Haemophilus influenzae immunoglobulin A1 (**IgA1**) proteases, and this study increases the number of antigenic types to more than 30. To address the role played in vivo by this polymorphism, sequential H. influenzae isolates from three healthy children and three patients with chronic obstructive pulmonary disease (COPD) were examined. Healthy children showed a frequent clonal exchange, with each replacing clone expressing an antigenic type of **IgA1** protease not previously encountered. In contrast, COPD patients were colonized by a single clone for a significantly longer period. In one COPD clone, a change occurred in **IgA1** protease cleavage specificity and antigenic properties. In conclusion, frequent exchange of clones expressing antigenically different **IgA1** proteases seems to be the principal mechanism by which H. influenzae evades the immune response of healthy children against **IgA1** protease. The results support the view that **IgA1** protease activity is important for successful colonization of H. influenzae on **mucosal** membranes.
CT Adolescent
*Antigenic Variation
Bacterial Outer Membrane Proteins: AN, analysis
Child
Child, Preschool
DNA Fingerprinting
*Haemophilus influenzae: EN, enzymology
Humans
Infant
*Lung Diseases, Obstructive: MI, microbiology
Peptide Hydrolases: GE, genetics
*Peptide Hydrolases: IM, immunology
Peptide Hydrolases: ME, metabolism
Research Support, Non-U.S. Gov't
*Serine Endopeptidases
CN 0 (Bacterial Outer Membrane Proteins); EC 3.4.- (Peptide Hydrolases); EC 3.4.21 (Serine Endopeptidases); EC 3.4.21.72 (IgA-specific serine endopeptidase)

ANSWER 11 OF 17 MEDLINE on STN
AN 94011364 MEDLINE
DN PubMed ID: 8406854
TI Antigenic variation of immunoglobulin A1 proteases among sequential isolates of Haemophilus influenzae from healthy children and patients with chronic obstructive pulmonary disease.
AU Lomholt H; van Alphen L; Kilian M
CS Institute of Medical Microbiology, University of Aarhus, Denmark.
SO Infection and immunity, (1993 Nov) 61 (11) 4575-81.
Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199311
ED Entered STN: 19940117
Last Updated on STN: 19960129
Entered Medline: 19931124
AB Considerable antigenic heterogeneity has been identified among Haemophilus influenzae immunoglobulin A1 (**IgA1**) proteases, and this study increases the number of antigenic types to more than 30. To address the role played in vivo by this polymorphism, sequential H. influenzae isolates from three healthy children and three patients with chronic obstructive pulmonary disease (COPD) were examined. Healthy children showed a frequent clonal exchange, with each replacing clone expressing an antigenic type of **IgA1** protease not previously encountered. In contrast, COPD patients were colonized by a single clone for a significantly longer period. In one COPD clone, a change occurred in **IgA1** protease cleavage specificity and antigenic properties. In conclusion, frequent exchange of clones expressing antigenically different **IgA1** proteases seems to be the principal mechanism by which H. influenzae evades the immune response of healthy children against **IgA1** protease. The results support the view that **IgA1** protease activity is important for successful colonization of H. influenzae on **mucosal** membranes.
CT Adolescent
*Antigenic Variation
Bacterial Outer Membrane Proteins: AN, analysis
Child
Child, Preschool
DNA Fingerprinting
*Haemophilus influenzae: EN, enzymology
Humans
Infant
*Lung Diseases, Obstructive: MI, microbiology
Peptide Hydrolases: GE, genetics
*Peptide Hydrolases: IM, immunology
Peptide Hydrolases: ME, metabolism
Research Support, Non-U.S. Gov't
*Serine Endopeptidases
CN 0 (Bacterial Outer Membrane Proteins); EC 3.4.- (Peptide Hydrolases); EC 3.4.21 (Serine Endopeptidases); EC 3.4.21.72 (IgA-specific serine endopeptidase)

updated Search
10/018,127
Lycook 8/5/05

d his

(FILE 'HOME' ENTERED AT 12:43:39 ON 05 AUG 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 12:43:57 ON 05 AUG 2005

```
L1             0 S APNOEA? AND IGA1?
L2          4092 S IGA1?
L3             1 S L2 AND SIDS?
L4           342 S L2 AND ALTE?
L5             0 S L2 AND (INFANT DEALTH)
L6             1 S L2 AND (INFANT DEATH)
L7           124 DUPLICATE REMOVE L4 (218 DUPLICATES REMOVED)
L8             1 S L7 AND DEATH
L9             2 S L7 AND INFANT?
L10            2 DUPLICATE REMOVE L9 (0 DUPLICATES REMOVED)
L11            1 S L10 NOT L8
L12          627 S L2 AND MUCOSAL?
L13          238 DUPLICATE REMOVE L12 (389 DUPLICATES REMOVED)
L14        82468 S (URINARY TRACT INFECTION)
L15            0 S L13 AND L14
L16           12 S L14 AND IGA1
L17            3 DUPLICATE REMOVE L16 (9 DUPLICATES REMOVED)
L18          798 S (SALIVARY IMMUNOGLOBULIN?)
L19          160 S L18 AND MUCOSAL?
L20           23 S L19 AND IGA1?
L21            9 DUPLICATE REMOVE L20 (14 DUPLICATES REMOVED)
L22            7 S L2 AND DEATH?
L23            3 DUPLICATE REMOVE L22 (4 DUPLICATES REMOVED)
L24           28 S L13 AND ELISA
L25            1 S L24 AND URIN?
```

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 13:36:42 ON 05 AUG 2005

```
L26          614 S SIDS AND REVIEW
L27          158 S ALTE AND REVIEW
L28           34 S L26 AND L27
L29           20 DUPLICATE REMOVE L28 (14 DUPLICATES REMOVED)
L30            0 S L29 AND MUCOSAL?
L31            0 S L29 AND IMMUNOGLOB?
L32            0 S L29 AND IGA?
```

=> s l29 and l2

ANSWER 15 OF 20 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 8

AN 1997:356356 BIOSIS

DN PREV199799662759

TI Otolaryngic manifestations in children presenting with apparent life-threatening events.

AU McMurray, J. Scott [Reprint author]; Holinger, Lauren D.

CS Pediatric Otolyaryngology Maxillofacial Surgery, Children's Hosp. Med. Cent., 3333 Burnet Avenue, Cincinnati, OH 45229-3039, USA

SO Otolaryngology - Head and Neck Surgery, (1997) Vol. 116, No. 6 PART 1, pp. 575-579.
CODEN: OHNSDL. ISSN: 0194-5998.

DT Article

LA English

ED Entered STN: 25 Aug 1997
Last Updated on STN: 25 Aug 1997

AB Apparent life-threatening event (**ALTE**) is a term used to characterize an event of unknown cause after an infant is found limp, cyanotic, bradycardic, and/or requiring resuscitation. Uke sudden infant death syndrome (**SIDS**), **ALTE** is a general term used until a precise diagnosis can be established. The relationship between **ALTE** and **SIDS** has not been clearly defined, although 7 to 15 percent of children with **ALTE** die of **SIDS**. If children with **ALTE** are at greater risk for **SIDS**, morbidity and mortality may be prevented if the underlying pathology can be identified and corrected or closely monitored. The otolaryngologist is being consulted more frequently to evaluate children who have been through an **ALTE** to help elucidate any underlying pathology that may have caused the near-death experience. This retrospective chart **review** reports the evaluation of 30 infants with **ALTE** requiring consultation by the Division of Pediatric Otolaryngology at the Children's Memorial Hospital in Chicago during a 3-year period. We reviewed the literature and here compare our findings with current animal models. Of the 30 children evaluated, 53% had gastroesophageal reflux, 40% had laryngeal abnormalities, 13% had tracheal abnormalities, and 10% had pharyngeal abnormalities. Thirteen percent of the children had nonotolaryngic anomalies identified during evaluation. Surgical intervention was required in 10 patients and medical treatment was used in 18. When evaluating a child with **ALTE**, a complete history and physical examination, evaluation for gastroesophageal reflux, assessment for upper airway obstruction by radiographs and endoscopy, and a multidisciplinary approach are recommended.

CC Pathology - Diagnostic 12504
Pathology - Therapy 12512
Digestive system - General and methods 14001
Respiratory system - General and methods 16001
Pediatrics - 25000

IT Major Concepts
Digestive System (Ingestion and Assimilation); Pathology; Pediatrics (Human Medicine, Medical Sciences); Respiratory System (Respiration)

IT Miscellaneous Descriptors
APPARENT LIFE-THREATENING EVENT; DIAGNOSIS; DIGESTIVE SYSTEM DISEASE; DISEASE-MISCELLANEOUS; GASTROESOPHAGEAL REFLUX; INFANT; LARYNGEAL ABNORMALITIES; OTOLARYNGIC MANIFESTATIONS; OTOLARYNGOLOGY; PATHOLOGY; PATIENT; PEDIATRICS; PHARYNGEAL ABNORMALITIES; SUDDEN INFANT DEATH SYNDROME; TRACHEAL ABNORMALITIES; TREATMENT

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes

ANSWER 15 OF 20 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 8

AN 1997:356356 BIOSIS

DN PREV199799662759

TI Otolaryngic manifestations in children presenting with apparent life-threatening events.

AU McMurray, J. Scott [Reprint author]; Holinger, Lauren D.

CS Pediatric Otolyaryngology Maxillofacial Surgery, Children's Hosp. Med. Cent., 3333 Burnet Avenue, Cincinnati, OH 45229-3039, USA

SO Otolaryngology - Head and Neck Surgery, (1997) Vol. 116, No. 6 PART 1, pp. 575-579.
CODEN: OHNSDL. ISSN: 0194-5998.

DT Article

LA English

ED Entered STN: 25 Aug 1997
Last Updated on STN: 25 Aug 1997

AB Apparent life-threatening event (**ALTE**) is a term used to characterize an event of unknown cause after an infant is found limp, cyanotic, bradycardic, and/or requiring resuscitation. Uke sudden infant death syndrome (**SIDS**), **ALTE** is a general term used until a precise diagnosis can be established. The relationship between **ALTE** and **SIDS** has not been clearly defined, although 7 to 15 percent of children with **ALTE** die of **SIDS**. If children with **ALTE** are at greater risk for **SIDS**, morbidity and mortality may be prevented if the underlying pathology can be identified and corrected or closely monitored. The otolaryngologist is being consulted more frequently to evaluate children who have been through an **ALTE** to help elucidate any underlying pathology that may have caused the near-death experience. This retrospective chart **review** reports the evaluation of 30 infants with **ALTE** requiring consultation by the Division of Pediatric Otolaryngology at the Children's Memorial Hospital in Chicago during a 3-year period. We reviewed the literature and here compare our findings with current animal models. Of the 30 children evaluated, 53% had gastroesophageal reflux, 40% had laryngeal abnormalities, 13% had tracheal abnormalities, and 10% had pharyngeal abnormalities. Thirteen percent of the children had nonotolaryngic anomalies identified during evaluation. Surgical intervention was required in 10 patients and medical treatment was used in 18. When evaluating a child with **ALTE**, a complete history and physical examination, evaluation for gastroesophageal reflux, assessment for upper airway obstruction by radiographs and endoscopy, and a multidisciplinary approach are recommended.

CC Pathology - Diagnostic 12504
Pathology - Therapy 12512
Digestive system - General and methods 14001
Respiratory system - General and methods 16001
Pediatrics - 25000

IT Major Concepts
Digestive System (Ingestion and Assimilation); Pathology; Pediatrics (Human Medicine, Medical Sciences); Respiratory System (Respiration)

IT Miscellaneous Descriptors
APPARENT LIFE-THREATENING EVENT; DIAGNOSIS; DIGESTIVE SYSTEM DISEASE; DISEASE-MISCELLANEOUS; GASTROESOPHAGEAL REFLUX; INFANT; LARYNGEAL ABNORMALITIES; OTOLARYNGIC MANIFESTATIONS; OTOLARYNGOLOGY; PATHOLOGY; PATIENT; PEDIATRICS; PHARYNGEAL ABNORMALITIES; SUDDEN INFANT DEATH SYNDROME; TRACHEAL ABNORMALITIES; TREATMENT

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

Animals, Chordates, Humans, Mammals, Primates, Vertebrates

```
d his

     (FILE 'HOME' ENTERED AT 12:43:39 ON 05 AUG 2005)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
     12:43:57 ON 05 AUG 2005
L1            0 S APNOEA? AND IGA1?
L2         4092 S IGA1?
L3            1 S L2 AND SIDS?
L4          342 S L2 AND ALTE?
L5            0 S L2 AND (INFANT DEALTH)
L6            1 S L2 AND (INFANT DEATH)
L7          124 DUPLICATE REMOVE L4 (218 DUPLICATES REMOVED)
L8            1 S L7 AND DEATH
L9            2 S L7 AND INFANT?
L10           2 DUPLICATE REMOVE L9 (0 DUPLICATES REMOVED)
L11           1 S L10 NOT L8
L12         627 S L2 AND MUCOSAL?
L13         238 DUPLICATE REMOVE L12 (389 DUPLICATES REMOVED)
L14       82468 S (URINARY TRACT INFECTION)
L15           0 S L13 AND L14
L16          12 S L14 AND IGA1
L17           3 DUPLICATE REMOVE L16 (9 DUPLICATES REMOVED)
L18         798 S (SALIVARY IMMUNOGLOBULIN?)
L19         160 S L18 AND MUCOSAL?
L20          23 S L19 AND IGA1?
L21           9 DUPLICATE REMOVE L20 (14 DUPLICATES REMOVED)
L22           7 S L2 AND DEATH?
L23           3 DUPLICATE REMOVE L22 (4 DUPLICATES REMOVED)
L24          28 S L13 AND ELISA
L25           1 S L24 AND URIN?

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
     13:36:42 ON 05 AUG 2005
L26         614 S SIDS AND REVIEW
L27         158 S ALTE AND REVIEW
L28          34 S L26 AND L27
L29          20 DUPLICATE REMOVE L28 (14 DUPLICATES REMOVED)
L30           0 S L29 AND MUCOSAL?
L31           0 S L29 AND IMMUNOGLOB?
L32           0 S L29 AND IGA?

=> s l29 and l2
```